

N THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Jeffrey A. Von Arx et al.

Examiner: George C. Manuel

Serial No.: 10/025,183

Group Art Unit: 3762

Filed: December 19, 2001

Docket: 279.391US1

Title: AN IMPLANTABLE MEDICAL DEVICE WITH TWO OR MORE TELEMETRY

SYSTEMS

APPEAL BRIEF UNDER 37 CFR § 41.37

Mail Stop Appeal Brief- Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

The Appeal Brief is presented in support of the Notice of Appeal to the Board of Patent Appeals and Interferences, filed on August 25, 2005, from the Final Rejection of claims 1-42 and 46 of the above-identified application, as set forth in the Final Office Action dated May 25, 2005.

The Commissioner of Patents and Trademarks is hereby authorized to charge Deposit Account No. 19-0743 in the amount of 500.00 which represents the requisite fee set forth in 37 C.F.R. § 41.2(b)(2). Appellant respectfully requests consideration and reversal of the Examiner's rejections of the pending claims.



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1. REAL PARTY IN INTEREST

The real party in interest of the above-captioned patent application is the assignee, CARDIAC PACEMAKERS, INC.

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2. RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to Appellant that will have a bearing on the Board's decision in the present appeal.

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3. STATUS OF THE CLAIMS

Claims 1-46 are currently pending in this patent application. A final Office Action is dated May 25, 2005. Claims 1-42 and 46 stand finally rejected, and their rejection is the subject of this appeal. Claims 43-45 are objected to by the Examiner. The pending claims are presented in the Claims Appendix.

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4. STATUS OF AMENDMENTS

No claim amendments were filed after the final rejection dated May 25, 2005.

5. SUMMARY OF CLAIMED SUBJECT MATTER

Independent claim 1 relates to a system including an implantable medical device (for example, Fig. 1, item 100 and Fig. 2, item 205), a near field antenna (for example, Fig. 1, item 150A and Fig. 2, item 225) and a far field antenna (for example, Fig. 1, item 110A and Fig. 2, item 235). The implantable medical device includes an electronic circuit (for example, Fig. 2, item 240). The near field antenna, connected to the electronic circuit, is for conducting inductively coupled wireless communication with the implantable medical device. The far field antenna, also connected to the electronic circuit, is for conducting long range radio frequency (RF) wireless communication with the implantable medical device according to a duty cycle (for example, Fig. 7, items 410-450).

Independent claim 17 relates to a method including coupling a plurality of wireless transmitters of an implantable medical device to a circuit of the device and programming the device to select one or more of the plurality of wireless transmitters for transmitting an outbound signal (for example, page 5, lines 5-25).

Independent claim 29 relates to a method including receiving an inbound wireless signal at an implantable medical device and selecting one of a plurality of data receivers of the implantable medical device. In addition, the method includes decoding data from the inbound wireless signal at the output of the selected receiver (for example, page 17, lines 8-10).

Independent claim 36 relates to a method including receiving a first wireless signal from a near field transmission source and opening a channel to communicate using a wireless far field link. In addition, the method includes receiving data on the channel and closing the channel after a predetermined period. Furthermore, the method includes storing the data in memory of an implantable medical device and operating the implantable medical device based on the memory (for example, page 7, lines 1-13).

Independent claim 41 relates to a method including powering a near field link of an implantable medical device and powering a far field receiver of the device according to a duty cycle. In addition, the method includes transmitting a near field acknowledge

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signal using the near field link if a near field signal is received and powering a far field transmitter of the device after having received a far field key signal using the far field receiver during a time when the far field receiver is powered (for example, page 2, lines 15-21 and page 26, lines 11-20).

This summary does not provide an exhaustive or exclusive view of the present subject matter, and Appellant refers to the appended pending claims and their legal equivalents for a complete statement of the invention.

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6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- 1) Claims 1-3, 5, and 8-40 stand rejected under 35 USC § 102(b) as being anticipated by Barreras (U.S. Patent No. 5,807,397).
- 2) Claims 1, 4, 7, 39, 40, and 46 stand rejected under 35 USC § 103(a) as being unpatentable over Barreras.
- 3) Claim 6 stands rejected under 35 USC § 103(a) as being unpatentable over Barreras in view of Cubley et al (US 2003/0028902A1).
- 4) Claims 41 and 42 stand rejected under 35 USC § 103(a) as being unpatentable over Barreras in view of White et al (U.S. Patent No. 6,531,982).

7. ARGUMENT

A) The Applicable Law

Anticipation under 35 U.S.C. § 102 requires the disclosure in a single prior art reference of each element of the claim under consideration. See Verdegaal Bros. V. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987). It is not enough, however, that the prior art reference discloses all the claimed elements in isolation. Rather, "[a]nticipation requires the presence in a single prior reference disclosure of each and every element of the claimed invention, arranged as in the claim." Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 221 USPO 481, 485 (Fed. Cir. 1984) (citing Connell v. Sears, Roebuck & Co., 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)) (emphasis added). "The identical invention must be shown in as complete detail as is contained in the ... claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989); MPEP § 2131 (emphasis added). In interpreting the claims it is widely recognized that a patentee is free to be his own lexicographer. See, e.g., Autogiro Co. of America v. United States, 384 F.2d 391,397 (Ct. Cl. 1967). However, unless a special definition is clearly stated in the patent specification or prosecution history, claim terms are to be given their ordinary and customary meaning in the field of the invention. See Vitronics, 90 F.3d at 1582, 39 U.S.P.Q.2d at 1576.

The Examiner also has the burden under 35 U.S.C. § 103 to establish a *prima* facie case of obviousness. In re Fine, 837 F.2d 1071, 1074, 5 U.S.P.Q.2d (BNA) 1596, 1598 (Fed. Cir. 1988). In combining prior art references to construct a *prima facie* case, the Examiner must show some objective teaching in the prior art or some knowledge generally available to one of ordinary skill in the art that would lead an individual to combine the relevant teaching of the references. *Id.* The M.P.E.P. contains explicit direction to the Examiner that agrees with the *In re Fine* court:

In order for the Examiner to establish a *prima facie* case of obviousness, three base criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a

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reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Appellant's disclosure. *M.P.E.P.* § 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d (BNA) 1438 (Fed. Cir. 1991)).

An invention can be obvious even though the suggestion to combine prior art teachings is not found in a specific reference. In re Oetiker, 977 F.2d 1443, 24 U.S.P.Q.2d (BNA) 1443 (Fed. Cir. 1992). However, while it is not necessary that the cited references or prior art specifically suggest making the combination, there must be some teaching somewhere which provides the suggestion or motivation to combine prior art teachings and applies that combination to solve the same or similar problem which the claimed invention addresses. One of ordinary skill in the art will be presumed to know of any such teaching. (See, e.g., In re Nilssen, 851 F.2d 1401, 1403, 7 U.S.P.Q.2d 1500, 1502 (Fed. Cir. 1988) and In re Wood, 599 F.2d 1032, 1037, 202 U.S.P.Q. 171, 174 (C.C.P.A. 1979)). However, the level of skill is not that of the person who is an innovator but rather that of the person who follows the conventional wisdom in the art. Standard Oil Co. v. American Cyanamid Co., 774 F.2d 448, 474, 227 U.S.P.Q. 293, 298 (Fed. Cir. 1985). The requirement of a suggestion or motivation to combine references in a prima facie case of obviousness is emphasized in the Federal Circuit opinion, In re Sang Su Lee, 277 F.3d 1338; 61 U.S.P.Q.2D 1430 (Fed. Cir. 2002), which notes that the motivation must be supported by evidence in the record.

The test for obviousness under § 103 must take into consideration the invention as a whole; that is, one must consider the particular problem solved by the combination of elements that define the invention. *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1143, 227 U.S.P.Q. 543, 551 (Fed. Cir. 1985). References must be considered in their entirety, including parts that teach away from the claims. See M.P.E.P. § 2141.02. The fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 16 USPQ2d 1430 (Fed. Cir. 1990); M.P.E.P. § 2143.01.

B. Discussion

1. Claims 1-3, 5, and 8-40, Barreras and anticipation under 35 U.S.C. §

Appellant respectfully submits that Barreras does not appear to teach or disclose the identical subject matter as recited in independent claims 1, 17, 29, and 36. For example, as to claim 1, Appellant is unable to find, in Barreras, a teaching or disclosure of a far field antenna connected to the electronic circuit for conducting long range radio frequency (RF) wireless communication with the implantable medical device according to a duty cycle, as recited in the claim. The Examiner asserts that "the antenna 11 of Barreras clearly works according to a 'duty cycle' with modulated and demodulated signals." Despite the Examiner's use of the word "clearly," the Office Action appears silent as to a citation in support of the assertion.

The Office Action (page 2) asserts that "a 'duty cycle' is merely the ratio of 'on' time to 'total' time." The Examiner explains:

A modulated signal comprises a signal in which the amplitude of the signal changes with time from a base line comprising a carrier signal. When the amplitude of the modulated signal is positive with respect to the base line, the antenna is powered positively. When the amplitude of the modulated signal remains at the base line, the antenna is unpowered with respect to the modulated signal. *Pages 2 and 3*.

Appellant respectfully traverses and notes that the Office Action appears silent as to a citation to Barreras in support of either the Examiner's definition or the Examiner's explanation. Appellant neither agrees nor disagrees with the Examiner's definition or the Examiner's explanation. Indeed, the Examiner's interpretation as to the amplitude of a modulated signal and a carrier signal and notions of "powered" and "unpowered" appears arbitrary and without reference to a specific teaching or disclosure found in the cited document. Appellant submits that Barreras does not appear to teach or disclose the identical subject matter in as much detail as recited in the claim. Barreras appears silent as to relative amplitudes and ratios, and thus, does not even provide support for the asserted definition and explanation set forth by the Examiner.

Appellant's earlier request for withdrawal or citation to an authority in support of the Office Action interpretation remains unmet.

Furthermore, the Examiner asserts that "it is inherent the far field antenna is capable of long range radio frequency wireless communication." Pursuant to M.P.E.P. § 2112, to rely on the theory of inherency, the Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the alleged inherent characteristic necessarily flows from the teachings of the applied prior art. Notwithstanding the absence of a basis in fact and/or technical reasoning in the record, Appellant notes that Barreras discusses antenna 11 in terms not consistent with the Examiner's interpretation. For example, at column 12, lines 47 et. seq, Barreras recites "portability is necessary because antenna 17 in within programmer unit 16 must be placed relatively close to implanted stimulator 10 in order to transfer the commands and programming information from antenna 17 to antenna 11." In addition, the discussion in Barreras at column 18, lines 53 et. seq. states "[t]he patch unit 612 is adapted to be placed on the skin of the patient near the implant." Accordingly, Appellant respectfully submits Barreras does not teach or disclose a far field antenna. Thus, it appears that Barreras does not provide a teaching consistent with the Examiner's chosen interpretation. Accordingly, Appellant submits that the Examiner has not met the burden of providing objective evidence or cogent technical reasoning to support the conclusion of inherency.

As to claim 17, Appellant is unable to find, in Barreras, a teaching or disclosure of programming the device to select one or more of the plurality of wireless transmitters for transmitting an outbound signal, as recited in the claim. Indeed, Appellant is unable to find a plurality of wireless transmitters in Barreras. The Examiner refers to "wireless transmitters 11 and 30" however Appellant finds no support for such an interpretation in the cited document. In particular, Barrares, appears to describe element 30 with terms such as "inductor receiver coil 30" (column 10, line 40), "received by inductor 30" (column 11, lines 14-15), "inductor receiver coil 30" (column 11, line 22) and "accept RF coupled power . . . with respect to inductors 82 and 30" (column 15, line 6-8). Accordingly, Appellant finds no support for interpretation of element 30 as a transmitter and the Examiner has not provided a supportive citation based on evidence of record.

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Furthermore, Appellant submits that Barrares does not teach or disclose the aforementioned programming. Barreras does not appear to teach or disclose a plurality of transmitters, and thus, it follows, Barreras has no need to teach or disclose programming as recited in the claim.

The Office Action asserts that "it is inherent the device 10 is programmed to provide this function so that the antenna 11 signal is distinguished for antenna 21 and not antenna 17." Here again the Examiner has not met the burden of providing a basis in fact and/or technical reasoning to reasonably support the determination that the alleged inherent characteristic necessarily flows from the teachings of the applied prior art. Notwithstanding the absence of a basis in fact and/or technical reasoning in the record, Appellant notes that Barreras appears silent as to evidence in support of the Examiner's interpretation. The Examiner provide no citation to authority in support of the asserted interpretation. Accordingly, Appellant respectfully submits Barreras does not teach or disclose programming meeting the recited claim language. Thus, it appears that Barreras does not provide a teaching consistent with the Examiner's chosen interpretation. Appellant submits that the Examiner has not met the burden of providing objective evidence or cogent technical reasoning to support the conclusion of inherency.

As to claim 29, Appellant respectfully submits that Barreras does not teach or disclose selecting one of a plurality of data receivers of the implantable medical device, as recited in the claim. The Examiner refers to inductor 30 however, Applicant submits that the evidence of record does not support a conclusion that inductor 30 is capable of receiving data. Indeed, Appellant notes the discussion of RF power and absence of a discussion concerning data. Accordingly, Applicant requests reversal of the rejection.

As to claim 36, Appellant is unable to find, in Barreras, a teaching or disclosure of closing the channel after a predetermined period, as recited in the claim. The Office Action refers to switch 72, however, Appellant submits that simply identifying such a component does not serve to establish a teaching or disclosure of the particular elements recited in the claim.

The Examiner asserts that "it is inherent the patient does not remain within proximal range of programmer unit 16 or transmitter unit 20 continuously and after a predetermined period of time, the devices are removed and the channel is closed." As

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with the Examiner's previous assertions of inherency, the Examiner again has not met the burden of providing a basis in fact and/or technical reasoning to reasonably support the determination that the alleged inherent characteristic necessarily flows from the teachings of the applied prior art. Notwithstanding the absence of a basis in fact and/or technical reasoning in the record, Appellant notes that Barreras appears silent as to evidence in support of the Examiner's interpretation. The Examiner provides no citation to authority in support of the asserted interpretation. Accordingly, Appellant respectfully submits Barreras does not teach or disclose closing the channel after a predetermined period, as recited in the claim. Furthermore, M.P.E.P. § 2112 provides that "the evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." Here, however, the Examiner appears to rely on probabilities and possibilities of the patient not remaining within communication range rather than setting forth the requisite evidence.

For these and other reasons, it appears that *prima facie* anticipation has not been established with regard to independent claims 1, 17, 29 and 36. In addition, Appellant submits that the corresponding dependent claims are also in condition for allowance. Because Barreras fails to disclose the identical invention as claimed, Appellant respectfully traverses the rejections and requests reconsideration and allowance of claims 1-3, 5, and 8-40.

Claims 1, 4, 7, 39, 40 and 46, Barreras and obviousness under 35 USC § 103(a)

Appellant respectfully traverses the rejection and submits that *prima facie* obviousness has not been established. Barreras alone does not provide a teaching or suggestion of all recited claim elements, as described above.

In addition, Appellant submits that the Examiner has not set forth evidence of record in support of the proposed modification of Barreras. In particular, the Office

Action does not identify an objective teaching in the prior art or some knowledge generally available to one of ordinary skill in the art that would lead an individual to combine the relevant teaching of the references.

As for claims 1, 39, 40, and 46 the Office Action appears to make no effort to identify a motivation for combining Barreras with the knowledge of one of skill in the art. Appellant submits that the Examiner's silence is tacit acknowledgment that evidence of such motivation is not of record.

As for claims 4 and 7, the Office Action asserts that "one of ordinary skill in the art would have found it obvious to modify the antenna 11 of Barreras to comprise the features of a dipole or a circumferential antenna arrangement because these are two wellknown antenna configurations." Appellant respectfully submits that such reasoning is inadequate to actually "lead an individual to combine the relevant teachings." The Office Action assertion does not establish even a modicum of desirability and appears to be contrary to the precept of M.P.E.P. § 2143.03 which provides that the fact that references can be combined is not sufficient to establish prima facie obviousness. Furthermore, and pursuant to M.P.E.P. § 2143.01, an assertion concerning the level of skill in the art does not satisfy the requirement of providing the suggestion to combine references. The Office Action does not appear to identify, with specificity, the desirability of making the specific combination as recited in the claim. In particular, the Examiner does not appear to explain the reasons one of ordinary skill in the art would have been motivated to select and modify Barreras in order to render the claimed invention obvious.

Appellant submits that the Examiner's assertions are based on impermissible hindsight derived from the teachings of the present subject matter. The record does not evince a desirability for the proposed modification and thus the rejection appears improper. Reconsideration and reversal of the rejection is respectfully requested.

Claim 6, Barreras, Cubley, and obviousness under 35 USC § 103(a)

As to Cubley and Barreras, Appellant respectfully traverses the rejection and submits that prima facia obviousness has not been established. In particular, Appellant submits that the proposed combination does not teach or suggest all recited elements. For

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example, Appellant is unable to find, in the proposed combination, a teaching or suggestion of a far field antenna connected to the electronic circuit for conducting long range radio frequency (RF) wireless communication with the implantable medical device according to a duty cycle, as recited in claim 1 and from which claim 6 depends. Cubley does not appear to cure the shortcomings of Barreras and the Examiner does not appear to make an effort to assert otherwise. Accordingly, Appellant submits that the proposed combination does not teach or suggest all elements recited in the claim.

Furthermore, Appellant respectfully submits that the asserted motivation in support of the proposed combination is improper. The Examiner asserts that "one of ordinary skill in the art would have found it obvious to incorporate the antenna as part of the therapy lead because the antenna needs to be exposed external of a steel enclosure as shown in Cubley et al and the therapy lead readily accepts the antenna without affecting the operability of the lead for stimulation or sensing and the lead must likewise be place external the steel implantable enclosure." Appellant respectfully traverses such grounds for motivation and submits that support for such reasoning is not found in Barreras. Indeed, Barrares refers to a titanium casement (colum 15, line 51) and is silent as to a desirability for placement of an antenna external to the enclosure. Furthermore, the record is silent as to orientation of implantable antennas with respect to a titanium enclosure (as in Barreras). Accordingly, Appellant submits that the reasoning cited by the Examiner is inadequate to evince motivation to combine in the manner proposed.

For at least these reasons, Appellant submits that the rejection of claim 6 is improper. Reconsideration and reversal of the rejection is respectfully requested.

Claims 41 and 42, Barreras, White, and obviousness under 35 USC § 103(a)

As to White and Barreras, Appellant respectfully traverses the rejection and submits that prima facia obviousness has not been established. In particular, Appellant submits that the proposed combination does not teach or suggest all recited elements. For example, Appellant is unable to find, in the proposed combination, a teaching or suggestion of powering a far field transmitter of the device after having received a far

field key signal using the far field receiver during a time when the far field receiver is powered, as recited in claim 41 (and from which claim 42 depends). The Office Action does not identify a citation to such a teaching appearing in either of White or Barraras and Appellant is unable to find such a teaching. Accordingly, Appellant submits that the proposed combination does not teach or suggest all elements recited in the claims.

Furthermore, Appellant respectfully submits that the asserted motivation in support of the proposed combination is improper to establish *prima facia* obviousness. The Examiner asserts that "one of ordinary skill in the art would have found it obvious to provide near and far field acknowledge signals because it is well known in communication protocol as taught by White et al to provide such acknowledgement so it can be understood data transmitted was received." Appellant respectfully traverses such grounds for motivation and submits that such reasoning is inadequate to support the proposed combination of White and Barreras. The Examiner's reasoning does not identify a grounds for selecting and combining the particular art referenced.

Accordingly, Appellant submits that the reasoning cited by the Examiner is inadequate to evince motivation to combine in the manner proposed.

Furthermore, the Examiner has not identified a teaching from White that supplies an element missing from Barreras. For example, the proposed combination does not provide a teaching or suggestion as to a duty cycle, as recited in claim 41.

For at least these reasons, Appellant submits that the rejection of claims 41 and 42 is improper. Reconsideration and reversal of the rejection is respectfully requested.

Allowable Subject Matter

Claims 43-45 were objected to as being dependent upon a rejected base claim, but were indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Appellant respectfully submits that the pending claims are in condition for allowance for at least the reasons presented above. Reconsideration and allowance of claims 43-45 is respectfully requested.

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8. SUMMARY

For the reasons presented above, it is respectfully submitted that the art cited does not render the claims anticipated or obvious and that the pending claims are patentable over the cited art.

Therefore, Appellant respectfully requests reversal of all bases of rejection of all claims.

Respectfully submitted,

JEFFREY A. VON ARX et al.

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Appeal Brief-Patents, Commissioner for Patents, MS: Appeal Brief-Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 229 day of December,

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CLAIMS APPENDIX

The Claims on Appeal are as follows:

1. (Rejected) A system comprising:

an implantable medical device including an electronic circuit;

a near field antenna connected to the electronic circuit for conducting inductively coupled wireless communication with the implantable medical device; and

a far field antenna connected to the electronic circuit for conducting long range radio frequency (RF) wireless communication with the implantable medical device according to a duty cycle.

- 2. (Rejected) The system of claim 1, wherein the electronic circuit includes a cardiac rhythm management device.
- 3. (Rejected) The system of claim 1, wherein the near field antenna includes a coil.
- 4. (Rejected) The system of claim 1, wherein the far field antenna includes a dipole antenna.
- 5. (Rejected) The system of claim 1, wherein the far field antenna includes a monopole antenna.
- 6. (Rejected) The system of claim 1, wherein the far field antenna includes a conductor of a therapy lead.
- 7. (Rejected) The system of claim 1, wherein the far field antenna includes a circumferential antenna.

8. (Rejected) The system of claim 1, wherein the electronic circuit includes a

programmable therapy circuit.

9. (Rejected) The system of claim 1, wherein the electronic circuit includes a patient

monitoring circuit.

10. (Rejected) The system of claim 1, wherein the electronic circuit includes a diagnostic

circuit.

11. (Rejected) The system of claim 1, wherein the electronic circuit includes an RF

transmitter, an RF receiver, or an RF transceiver.

12. (Rejected) The system of claim 1, further comprising a programmer for wirelessly

communicating with the implantable medical device.

13. (Rejected) The system of claim 12, further comprising an external coil connected to

the programmer.

14. (Rejected) The system of claim 12, further comprising an RF antenna connected to

the programmer.

15. (Rejected) The system of claim 12, further comprising a set of instructions adapted

for execution by the programmer for receiving a signal from the implantable medical

device.

16. (Rejected) The system of claim 12, further comprising a set of instructions adapted

for execution by the programmer for transmitting a signal to the implantable medical

device.

17. (Rejected) A method comprising:

coupling a plurality of wireless transmitters of an implantable medical device to a

circuit of the device; and

programming the device to select one or more of the plurality of wireless

transmitters for transmitting an outbound signal.

18. (Rejected) The method of claim 17 wherein programming the device to select one or

more of the plurality of wireless transmitters includes programming the device to select a

transmitter having an inductively coupled antenna.

19. (Rejected) The method of claim 17 wherein programming the device to select one or

more of the plurality of wireless transmitters includes programming the device to select a

transmitter having a far field radiation antenna.

20. (Rejected) The method of claim 17, further comprising providing a receiver adapted

to receive the outbound signal at a far field distance from the implantable medical device.

21. (Rejected) The method of claim 17 wherein programming the device to select one or

more of the plurality of wireless transmitters for transmitting an outbound signal includes

programming the device to deselect a far field radio frequency (RF) transmitter of the

plurality of wireless transmitters.

22. (Rejected) The method of claim 17 wherein coupling a plurality of wireless

transmitters includes coupling a transmitter adapted for propagating an RF signal.

23. (Rejected) The method of claim 17, further comprising providing circuitry for

receiving physiological data at the implantable medical device.

24. (Rejected) The method of claim 17, further comprising providing circuitry for

receiving an operational parameter at the implantable medical device.

25. (Rejected) The method of claim 17, further comprising coupling at least one wireless receiver to the circuit.

- 26. (Rejected) The method of claim 25, further comprising providing programming to decode data received by a wireless receiver selected from the at least one wireless receiver.
- 27. (Rejected) The method of claim 25, further comprising providing programming to store data in a memory of the implantable medical device based on an inbound signal received by a wireless receiver selected from the at least one wireless receiver.
- 28. (Rejected) The method of claim 25, further comprising providing programming to operate the implantable medical device based on data encoded in the inbound signal.
- 29. (Rejected) A method comprising:

and

receiving an inbound wireless signal at an implantable medical device; selecting one of a plurality of data receivers of the implantable medical device;

at the output of the selected receiver, decoding data from the inbound wireless signal.

- 30. (Rejected) The method of claim 29, further comprising storing the decoded data in a memory of the implantable medical device
- 31. (Rejected) The method of claim 29, further comprising delivering therapy based on the decoded data.
- 32. (Rejected) The method of claim 29, wherein receiving an inbound wireless signal includes receiving an inbound wireless signal at a far field distance from a transmitter that propagated the inbound wireless signal.

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- 33. (Rejected) The method of claim 29, wherein receiving an inbound wireless signal includes receiving an operational parameter for the implantable medical device.
- 34. (Rejected) The method of claim 29, further comprising storing data in a memory of the implantable medical device based on the decoded data.
- 35. (Rejected) The method of claim 29, further comprising operating the implantable medical device based on the decoded data.
- 36. (Rejected) A method comprising:

receiving a first wireless signal from a near field transmission source; opening a channel to communicate using a wireless far field link; receiving data on the channel; closing the channel after a predetermined period; storing the data in memory of an implantable medical device; and operating the implantable medical device based on the memory.

- 37. (Rejected) The method of claim 36, wherein receiving a first wireless signal includes receiving an inductively coupled signal.
- 38. (Rejected) The method of claim 36, wherein opening a channel includes powering a radio frequency receiver.
- 39. (Rejected) The method of claim 36, further comprising receiving an update command before operating the implantable medical device based on the memory.
- 40. (Rejected) The method of claim 39, wherein receiving an update command includes receiving an update command from the near field transmission source.

powering a near field link of an implantable medical device;

powering a far field receiver of the device according to a duty cycle;

transmitting a near field acknowledge signal using the near field link if a near
field signal is received; and

powering a far field transmitter of the device after having received a far field key signal using the far field receiver during a time when the far field receiver is powered.

- 42. (Rejected) The method of claim 41 further comprising transmitting a far field acknowledge signal using the far field transmitter.
- 43. (Objected to) The method of claim 41 further comprising continuously powering the far field receiver after receiving a suspend duty cycle signal.
- 44. (Objected to) The method of claim 43 wherein receiving the suspend duty cycle signal includes receiving a near field signal.
- 45. (Objected to) The method of claim 43 wherein receiving the suspend duty cycle signal includes receiving a far field signal.
- 46. (Rejected) The method of claim 41 wherein powering the near field link includes continuously powering the near field link.

APPEAL BRIEF UNDER 37 C.F.R. § 41.37 Serial Number: 10/025,183 Filing Date: December 19, 2001 Title: AN IMPLANTABLE MEDICAL DEVICE WITH TWO OR MORE TELEMETRY SYSTEMS

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EVIDENCE APPENDIX

None.

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RELATED PROCEEDINGS APPENDIX

None.